#### SUMMARY OF WATER CONDITIONS

February 1, 2017

One has to go back a couple of decades to find a comparable year as wet as this one. All hydrologic regions shared in the bounty. With normal future weather, the water year will rank in the top 10 percent group of water years. The February 1 snowpack at 185 percent of average is the highest since 1995, but still less than the 1952 record of 265 percent.

**Forecasts** of median April through July runoff are expected to be about 145 percent of average compared to last year's forecast of 100 percent and an eventual snowmelt season runoff of 75 percent. The 2016 water year runoff was about 90 percent; the current forecast in this bulletin is for 170 percent statewide. Recent years have had higher runoff percentage in the north; this time the higher percentages are in the southern Sierra.

**Snowpack** water content is excellent at 185 percent for this date compared to 115 percent one year ago. The pack is 115 percent of the April 1 average, normally the date of maximum accumulation. February 1 amounts for this date range from 120 percent on the North Coast to 240 percent in the southern Sierra.

**Precipitation** from October through January was about 180 percent of average statewide compared to 115 percent last year. This time the lowest percentages are in the northwestern part of the state at 155 percent.

**Runoff** to date has been well above average at 265 percent compared to 95 percent one year ago on this date. Estimated January runoff was 265 percent of average with some flooding. Estimated runoff of the eight major rivers of the Sacramento-San Joaquin River region in January 2017 was 8.7 million acre-feet.

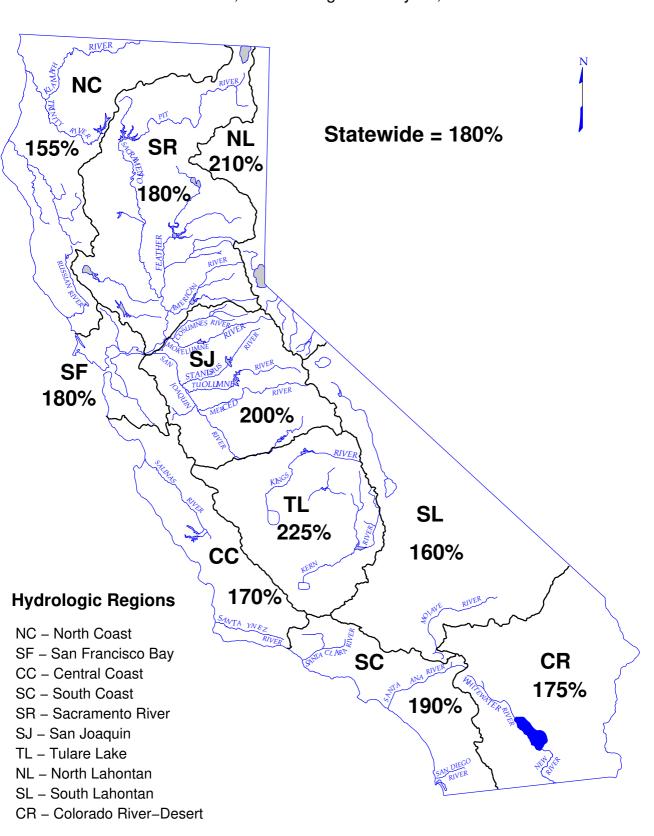
**Reservoir storage** is about 115 percent of average, vastly improved from the 65 percent at the end of January last year. Many reservoirs are making flood control releases.

### SUMMARY OF WATER CONDITIONS IN PERCENT OF AVERAGE

HYDROLOGIC REGION	PRECIPITATION OCTOBER 1 TO DATE	FEBRUARY 1 SNOW WATER CONTENT	FEBRUARY 1 RESERVOIR STORAGE	RUNOFF OCTOBER 1 TO DATE	APR-JULY RUNOFF FORECAST	WATER YEAR RUNOFF FORECAST
NORTH COAST	155	120	90	190	110	135
SAN FRANCISCO BAY	180		125	225		
CENTRAL COAST	170		75	280		
SOUTH COAST	190		90	75		
SACRAMENTO RIVER	180	165	120	220	130	165
SAN JOAQUIN RIVER	200	195	115	340	160	185
TULARE LAKE	225	240	135	225	175	180
NORTH LAHONTAN	210	210	90	265	160	175
SOUTH LAHONTAN	160	240	100	80	190	140
COLORADO RIVER-DESERT	175					
STATEWIDE	180	185	115	215	145	170

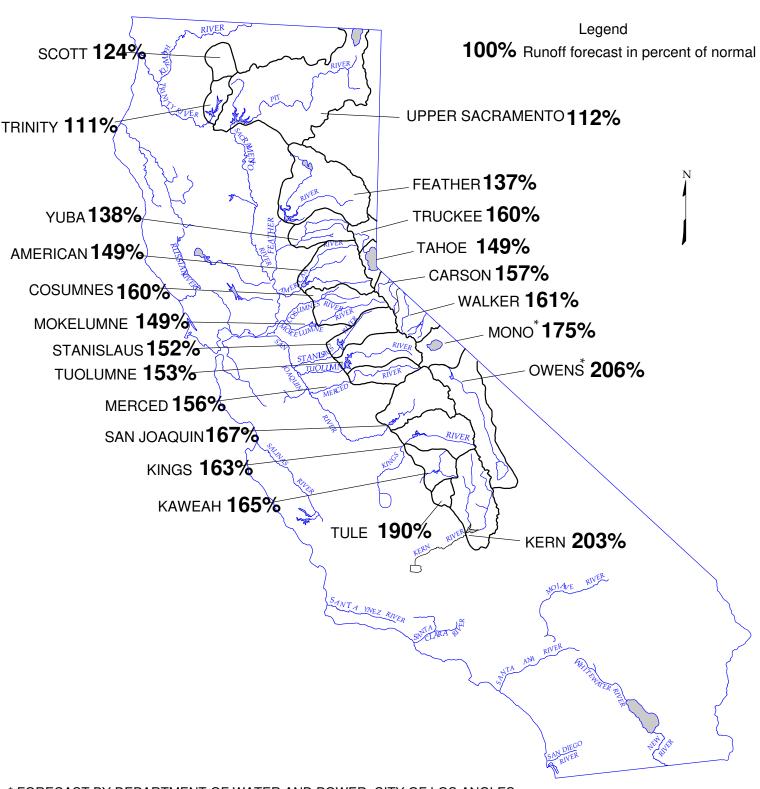
#### **SEASONAL PRECIPITATION**

IN PERCENT OF AVERAGE TO DATE
October 1, 2016 through January 31, 2017



## DEPARTMENT OF WATER RESOURCES CALIFORNIA COOPERATIVE SNOW SURVEYS

## FORECAST OF APRIL – JULY UNIMPAIRED SNOWMELT RUNOFF February 1, 2017



<sup>\*</sup> FORECAST BY DEPARTMENT OF WATER AND POWER, CITY OF LOS ANGLES

#### **FEBRUARY 1, 2017 FORECASTS APRIL-JULY UNIMPAIRED RUNOFF**

	Unimpaired Runoff in 1,000 Acre-Feet (1)							
HYDROLOGIC REGION	Н	ISTORICA	AL	FORECAST				
and Watershed	50 Yr Max Min of			Apr-Jul	Pct	Pct 80 %		
	Avg	of	Record	Forecasts	of	Probal	oility	
	(2)	Record	(11)		Avg	Range	(1)	
North Coast								
Trinity River at Lewiston Lake	639	1,593	80	710	111%	530 -	1,100	
SACRAMENTO RIVER								
Upper Sacramento River								
Sacramento River at Delta above Shasta Lake	295	751	39	300	102%			
McCloud River above Shasta Lake	385	850	185	410	106%			
Pit River near Montgomery Creek + Squaw Creek	1,020	2,098	480	1,170	115%			
Total Inflow to Shasta Lake	1,756	3,525	711	1,960	112%	1,500 -	2,96	
Sacramento River above Bend Bridge, near Red Bluff	2,421	5,117	943	2,740	113%	2,040 -	4,41	
Feather River								
Feather River at Lake Almanor near Prattville (3)	333	675	120	450	135%			
North Fork at Pulga (3)	1,028	2,416	243	1,390	135%			
Middle Fork near Clio (4)	86	518	4	120	140%			
South Fork at Ponderosa Dam (3)	110	267	13	150	136%	4 000	0 77	
Feather River at Oroville	1,704	4,676	378	2,330	137%	1,630 -	3,77	
Yuba River								
North Yuba below Goodyears Bar	279	647	51	380	136%			
Inflow to Jackson Mdws and Bowman Reservoirs (3)	112	236	25	155	138%			
South Yuba at Langs Crossing (3)	233	481	57	310	133%	0.40	0.00	
Yuba River near Smartsville plus Deer Creek	968	2,424	151	1,340	138%	940 -	2,03	
American River	000	740	40	000	4.450/			
North Fork at North Fork Dam (3)	262	716	43	380	145%			
Middle Fork near Auburn (3)	522	1,406	100	770	148%			
Silver Creek Below Camino Diversion Dam (3)  American River below Folsom Lake	173 1,199	386 3,074	37 185	260 <b>1,790</b>	150% 149%	1,240 -	2,81	
SAN JOAQUIN RIVER		-,-		,		, -	,-	
Cosumnes River at Michigan Bar	125	446	8	200	160%	130 -	380	
Mokelumne River	123	440	O	200	100 /6	130 -	30	
North Fork near West Point (5)	437	829	104	650	149%			
Total Inflow to Pardee Reservoir	457 457	1,076	75	<b>680</b>	149%	540 -	98	
Stanislaus River	457	1,070	13	000	14370	340 -	30	
Middle Fork below Beardsley Dam (3)	334	702	64	500	150%			
North Fork Inflow to McKays Point Dam (3)	224	503	34	340	152%			
Stanislaus River below Goodwin Reservoir (9)	682	1,710	116	1,040	152%	810 -	1,50	
Tuolumne River	002	1,7 10	110	1,040	132 /0	010 -	1,50	
Cherry Creek & Eleanor Creek near Hetch Hetchy	315	727	97	480	152%			
Tuolumme River near Hetch Hetchy	604	1,392	153	920	152%			
Tuolumne River below La Grange Reservoir (9)	1,193	2,682	301	1,820	153%	1,430 -	2,61	
Merced River	1,193	2,002	301	1,020	13370	1,430 -	2,01	
Merced River at Pohono Bridge	272	888	80	500	156%			
Merced River below Merced Falls (9)	372 623		104	580 <b>970</b>	156%	790 -	1,48	
• • • • • • • • • • • • • • • • • • • •	023	1,587	104	970	130%	790 -	1,40	
San Joaquin River San Joaquin River at Mammoth Pool (7)	1.006	2 270	225	1 600	1CE0/			
Big Creek below Huntington Lake (8)	1,026	2,279	235	1,690	165%			
South Fork near Florence Lake (7)	91 201	264 511	11 58	155 340	170% 169%			
San Joaquin River inflow to Millerton Lake	1,228	3,355	193	<b>2,050</b>	167%	1,690 -	2,87	
TULARE LAKE	1,220	0,000	100	2,000	107 70	1,000	2,07	
Kings River								
North Fork Kings River near Cliff Camp (3)	239	565	50	400	167%			
Kings River below Pine Flat Reservoir	1,210	3,113	208	1, <b>970</b>	163%	1,570 -	2,77	
	•					370 -		
Kaweah River below Terminus Reservoir	285	814	42	470	165% 190%	370 - 94 -	71	
	00						.,1	
Tule River below Lake Success	63	259	1	120	190%	94 -	21	
Kern River						94 -	21	
	63 384 458	1,203 1,657	83 57	770 <b>930</b>	201% 203%	780 -	21 1,41	

<sup>(1)</sup> See inside back cover for definition (2) All 50 year averages are based on years 1966-2015 unless otherwise noted (3) 50 year average based on years 1941-90 (4) 44 year average based on years 1936-79

<sup>(5) 36</sup> year average based on years 1936-72 (6) 45 year average based on years 1936-81 (7) 50 year average based on years 1953-2002 (8) 50 year average based on years 1946-1995

#### **FEBRUARY 1, 2017 FORECASTS** WATER YEAR UNIMPAIRED RUNOFF

	Unimpaired Runoff in 1,000 Acre-Feet (1)														
	ISTORIC		<u> </u>		I	DIS	TRIBUT	ION		,		FORECAST			
50 Yr	Max of	Min of Record	Oct Thru	Feb	Mar	۸۰۰	May	lus	Jul	۸	Sep	Water Year	Pct of	80 % Probabil	i+v,
Avg (2)	Record	(11)	Jan	reb	IVIAI	Apr	iviay	Jun	Jui	Aug	Sep	Forecasts	Avg	Range	•
(2)	recoord	(11)	oun									1 01000010	7119	rtango	( ' )
1348	2990	200	608	240	220	250	280	150	30	25	22	1,825	135%	1,515 -	2,495
860	1,965	165													
1,183	2,353	557													
3,002 5,831	5,150 10,796	1,484 2,479	2,948	1,290	1,050	700	625	365	270	230	222	7,700	132%	6,585 - 1	O 125
8,544	17,180	3,294	4,917	1,805	1,895	1,130	860	430	320	300	293	11,950	140%	10,150 - 1	
•	•	•	•	,	•	•						,		,	,
780 2,417	1,269 4,400	366 666													
219	637	24													
291	562	32	0.750	4 000	4 450	000	0.40	400	400	445	00	7 450	1000/	0.005	0.055
4,407	9,492	994	2,756	1,000	1,150	890	840	420	180	115	99	7,450	169%	6,035 - 1	0,355
564	1,056	102													
181 379	292 565	30 98													
2,268	4,926	369	1,838	510	590	460	520	290	70	30	22	4,330	191%	3,585 -	5,615
	•		,				-		-			,		, -	, =
616 1,070	1,234 2,575	66 144													
318	705	59													
2,626	6,382	349	2,384	650	745	590	680	420	100	25	16	5,610	214%	4,615 -	7,450
270	1 050	20	413	140	170	05	75	25	_	2	2	025	2470/	750	1 105
379	1,253	20	413	140	178	95	75	25	5	2	2	935	247%	750 -	1,405
626	1,009	197													
748	1,848	129	424	105	155	165	265	205	45	7	4	1,375	184%	1,170 -	1,800
471	929	88													
4 4 4 6	0.050	455	000	475	050	000	400	000	00	00	4.4	0.405	4000/	4.040	0.000
1,149	2,952	155	669	175	250	260	400	290	90	20	11	2,165	188%	1,810 -	2,830
461	1,147	123													
770	1,661	258	4.040	000	000	200	000	F00	000		00	A 575	4070/	0.070	4.000
1,909	4,631	383	1,048	300	330	380	630	580	230	55	22	3,575	187%	2,970 -	4,680
461	1,020	92													
992	2,787	150	512	175	180	200	350	320	100	26	12	1,875	189%	1,600 -	2,600
1,337	2,964	308													
112	298	14													
248 1,793	653 4,642	71 327	700	200	240	360	680	680	330	100	40	2 220	186%	2,840 -	4,390
1,700	7,072	521	, 00	200	270	300	500	500	550	100	70	3,330	10070	2,070	1,000
284	607	58 350	400	100	220	220	660	670	320	01	24	2 005	1750/	2.470	4.040
1,702 451	4,287 1,402	359 89	480 158	180 75	230 80	320 105	660 160	670 145	320 60	91 16	34 6	2,985 805	175% 178%	•	4,010 1,140
147	615	10	98	52	60	50	44	20	6	3	2		228%	280 -	515
		400													
558 728	1,577 2,318	163 130	184	73	110	190	310	280	150	55	28	1.380	190%	1,180 -	2,000
	_,0.0	100							.00			.,000	. 5 5 7 5	.,	_,000

<sup>(9)</sup> Forecast point names based on USGS gage names. Stanislaus below Goodwin also known as inflow to New Melones, Tuolumne River below La Grange also known as inflow to Don Pedro, Merced River below Merced Falls also known as inflow to McClure.

(10) Coordinated Forecast by National Weather Service California-Nevada River Forecast Center and Department of Water Resources, State of California

<sup>(11)</sup> For the tributaries, the period of record over which the minimum values are found does not include years after water year 2011.

\* Unimpaired runoff in months prior to forecast date are based on measured flows

#### **FEBRUARY 1, 2017 FORECASTS APRIL-JULY UNIMPAIRED RUNOFF**

	Apr-Jul Unimpaired Runoff in 1,000 Acre-Feet (							
HYDROLOGIC REGION	H	HISTORICA	<b>AL</b>	FOREC	AST			
and Watershed	50 Yr	Max	Min	Apr-Jul	Pct			
	Avg	of	of	Forecasts	of			
	(2)	Record	Record		Avg			
NORTH COAST Scott River								
Scott River nr Ft Jones (3)	173	398	22	214	124%			
Klamath River								
Total inflow to Upper Klamath Lake (4)	475	1,150	149	553	116%			
NORTH LAHONTAN								
Truckee River								
Lake Tahoe to Farad accretions	250	713	48	400	160%			
Lake Tahoe Rise (assuming gates closed, ft)	1.3	5.4	0.2	2.0	149%			
Carson River								
West Fork Carson River at Woodfords	52	135	10	78	150%			
East Fork Carson River near Gardnerville	182	407	43	290	159%			
Walker River								
West Walker River below Little Walker, near Coleville	153	330	35	230	150%			
East Walker River near Bridgeport	61	209	7	115	189%			
SOUTH LAHONTAN								
Owens River Total tributary flow to Owens River (5)	231	579	84	477	206%			

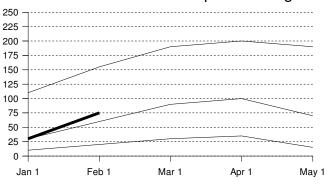
<sup>(1)</sup> See inside back cover for definition
(2) All 50 year averages are based on years 1966-2015 unless otherwise noted

<sup>(3)</sup> Forecast by National Weather Service California-Nevada River Forecast Center. 30 yr average (1981-2010)

<sup>(4)</sup> Forecast by U.S. Natural Resources Conservation Service and National Weather Service California-Nevada River Forecast Center, April through September forecast, 30 year average based on years 1981-2010.

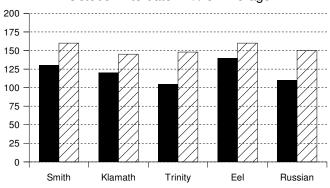
(5) Forecast by Department of Water and Power, City of Los Angeles, average based on years 1965-2015

#### Water Content in % of April 1 Average



#### Precipitation

#### October 1 to date in % of Average



# PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on this area was 155 percent of normal. Precipitation last month was about 165 percent of the monthly average. Seasonal precipitation at this time last year stood at 120 percent of normal.

NORTH COAST REGION

pack was holding 25.8 inch of water.

**SNOWPACK**- First of the month measurements

made at 10 snow courses indicate an area wide snow

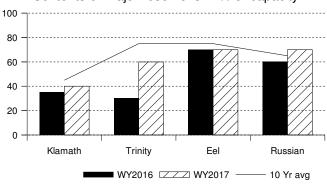
water equivalent of 22.8 inch. This is 120 percent of

seasonal (April 1) average. Last year at this time the

the February 1 average and 75 percent of the

#### Reservoir Storage

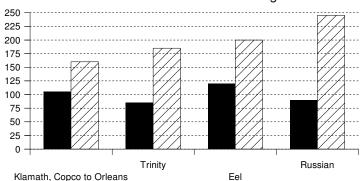
#### Contents of major reservoirs in % of capacity



**RESERVOIR STORAGE**- First of the month storage in 6 reservoirs was 1.9 million acre-feet which is 90 percent of average. About 60 percent of available capacity was being used. Storage in these reservoirs at this time last year was 50 percent of average.

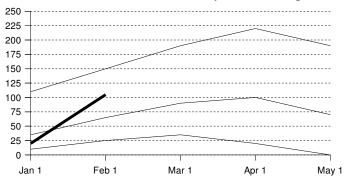
#### Runoff

#### October 1 to date in % of average



**RUNOFF** -Seasonal runoff of streams draining the area totaled 9.4 million acre-feet which is 190 percent of the average for this period. Last year, runoff for the same period was 110 percent of average.

#### Water Content in % of April 1 Average

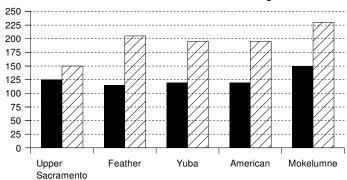


#### SACRAMENTO RIVER REGION

**SNOWPACK**- First of the month measurements made at 71 snow courses indicate an area wide snow water equivalent of 28.2 inches. This is 165 percent of the February 1 average and 105 percent of the seasonal (April 1) average. Last year at this time the pack was holding 22 inch of water.

#### Precipitation

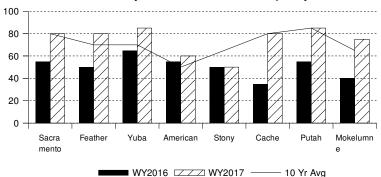
#### October 1 to date in % of Average



**PRECIPITATION** - Seasonal precipitation (October 1 through the end of last month) on this area was 180 percent of normal. Precipitation last month was 230 percent of the monthly average. Seasonal precipitation at this time last year stood at 115 percent of normal.

#### Reservoir Storage

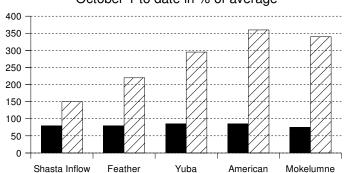
#### Contents of major reservoirs in % of capacity



**RESERVOIR STORAGE**- First of the month storage in 43 reservoirs was 12.5 million acre-feet which is 120 percent of average. About 75 percent of available capacity was being used. Storage in these reservoirs at this time last year was 80 percent of average.

#### Runoff

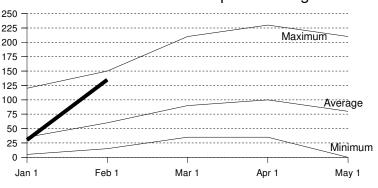
#### October 1 to date in % of average



**RUNOFF** - Seasonal runoff of streams draining the area totaled 11.9 million acre-feet which is 220 percent of average for this period. Last year, runoff for the same period was 85 percent of average.

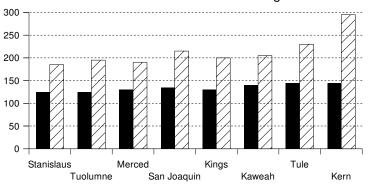
The Sacramento Region 40-30-30 Water Supply Index is forecast to be 11.4 assuming median meteorological conditions for the remainder of the year. This classifies the year as "wet" in the Sacramento Valley according to the State Water Resources Control Board.

#### Water Content in % of April 1 Average



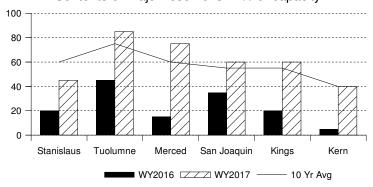
#### Precipitation

#### October 1 to date in % of Average



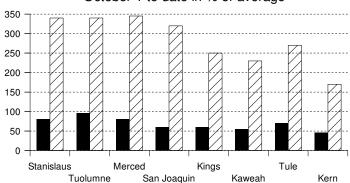
#### Reservoir Storage

#### Contents of major reservoirs in % of capacity



#### Runoff

#### October 1 to date in % of average



## SAN JOAQUIN RIVER AND TULARE LAKE REGIONS

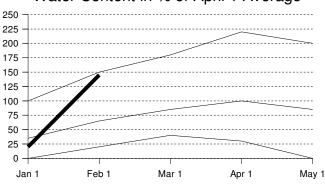
**SNOWPACK**- First of the month measurements made at 62 **San Joaquin River Region** snow courses indicate an area wide snow water equivalent of 37.2 inches. This is 195 percent of the February 1 average and 125 percent of seasonal average. Last year at this time the pack was holding 23.2 inches of water. At the same time 42 **Tulare Lake Region** snow courses indicated a basin-wide snow water equivalent of 33.1 inches which is 240 percent of the average for February 1 and 145 percent of the se asonal average. Last year at this time the basin was holding 14.4 inches of water.

PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on the San Joaquin Region was 200 percent of normal. Precipitation last month was 300 percent of the monthly average. Seasonal precipitation at this time last year stood at 135 percent of normal. Seasonal precipitation on the Tulare Lake Region was 225 percent of normal. Precipitation last month was about 365 percent of the monthly average. Seasonal precipitation at this time last year stood at 140 percent of normal.

**RESERVOIR STORAGE**- First of the month storage in 34 **San Joaquin Region** reservoirs was 8 million acre-feet which is 115 percent of average. About 70 percent of available capacity was being used. Storage in these reservoirs at this time last year was 50 percent of average. First of the month storage in 6 **Tulare Lake Region** reservoirs was 1 million acre-feet which is 135 percent of average and about 50 percent of available capacity. Storage in these reservoirs at this time last year was 45 percent of average.

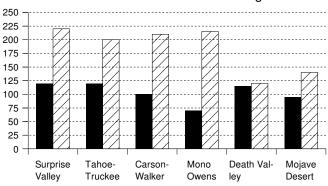
RUNOFF- Seasonal runoff of streams draining the San Joaquin Region totaled 3.8 million acre-feet which is 340 percent of average for this period. Last year, runoff for the same period was 80 percent of average. Seasonal runoff of streams draining the Tulare Lake Basin totaled 922 thousand acre-feet which is 225 percent of average for this period. Last year runoff for this same period was 55 percent of average. The San Joaquin Region 60-20-20 Water Supply Index is forecast to be 2.4 assuming 75 percent exceedance meteorological conditions. This classifies the year as "dry" in the San Joaquin Region according to the State Water Resources Control Board.

#### Water Content in % of April 1 Average



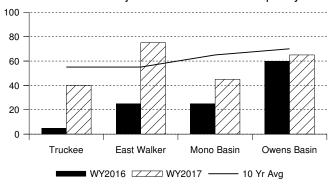
#### Precipitation

#### October 1 to date in % of Average



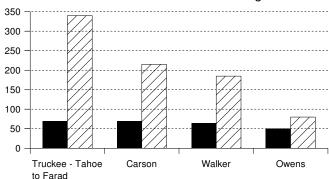
#### Reservoir Storage

#### Contents of major reservoirs in % of capacity



#### Runoff

#### October 1 to date in % of average



#### NORTH AND SOUTH LAHONTAN REGIONS

SNOWPACK- First of the month measurements made at 12 North Lahontan snow courses indicate an area wide snow water equivalent of 25.4 inches. This is 210 percent of the February 1 average and 135 percent of seasonal (April 1) average. Last year at this time the pack was holding 15 inches of water. At the same time 17 South Lahontan Region snow courses indicated a basin-wide snow water equivalent of 30.4 inches which is 240 percent of the average for February 1 and 150 percent of the seasonal average. Last year at this time the basin was holding 12.1 inches of water.

PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on the North Lahontan Region was 210 percent of normal. Precipitation last month was 325 percent of the monthly average. Seasonal precipitation at this time last year stood at 115 percent of normal. Seasonal precipitation on the South Lahontan Region was 160 percent of normal. Precipitation last month was about 300 percent of the monthly average. Seasonal precipitation at this time last year stood at 95 percent of normal.

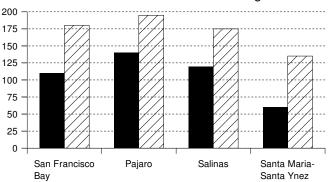
**RESERVOIR STORAGE**- First of the month storage in 5 North Lahontan reservoirs was 464 thousand acre-feet which is 90 percent of average. About 45 percent of available capacity was being used. Storage in these reservoirs at this time last year was 10 percent of average. Lake Tahoe was 2 feet above its natural rim on February 1. First of the month storage in 8 South Lahontan reservoirs was 267 thousand acre-feet which is 100 percent of average and about 65 percent of available capacity. Storage in these reservoirs at this time last year was 90 percent of average.

**RUNOFF**- Seasonal runoff of streams draining the **North Lahontan Region** totaled 382 thousand acrefeet which is 265 percent of average for this period. Last year, runoff for the same period was 70 percent of average.

Seasonal runoff of the Owens River in the **South Lahontan Region** totaled 36 thousand acre-feet which is 80 percent of average for this period. Last year runoff for this same period was 50 percent of average.

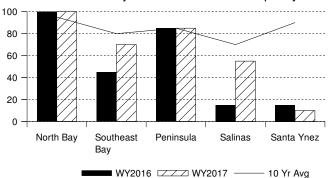
#### Precipitation

#### October 1 to date in % of Average



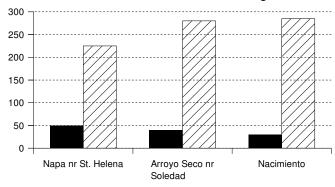
#### Reservoir Storage

Contents of major reservoirs in % of capacity



#### Runoff

#### October 1 to date in % of average



## SAN FRANCISCO BAY AND CENTRAL COAST REGIONS

PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on the San Francisco Bay Region was 180 percent of normal. Precipitation last month was about 255 percent of the monthly average. Seasonal precipitation at this time last year stood at 110 percent of normal. Seasonal precipitation on the Central Coast Region was 170 percent of normal. Precipitation last month was about 245 percent of the monthly average. Seasonal precipitation at this time last year stood at 105 percent of normal.

**RESERVOIR STORAGE**- First of the month storage in 17 **San Francisco Bay Region** reservoirs was 577 thousand acre-feet which is 125 percent of average. About 80 percent of available capacity was being used. Storage in these reservoirs at this time last year was 100 percent of average. First of the month storage in 6 **Central Coast Region** reservoirs was 455 thousand acre-feet which is 75 percent of average and about 45 percent of available capacity. Storage in these reservoirs at this time last year was 25 percent of average.

**RUNOFF**- Seasonal runoff of the Napa River in the **San Francisco Bay Region** totaled 76 thousand acre-feet which is 225 percent of average for this period. Last year, runoff for the same period was 50 percent of average.

Seasonal runoff of streams draining the **Central Coast Region** totaled 343 thousand acre-feet which is 280 percent of average for this period. Last year runoff for this same period was less than 30 percent of average.

#### **SOUTH COAST REGION**

**PRECIPITATION** - October through January (seasonal) precipitation on the **South Coast Region** was 190 percent of normal. January precipitation was 275 percent of the monthly average. Seasonal precipitation at this time last year was 75 percent of normal. Seasonal precipitation on the **Colorado River-Desert Region** was 175 percent of normal. Last year seasonal precipitation on the **Colorado River-Desert Region** was 95 percent of normal. Precipitation in January was 235 percent of average.

**RESERVOIR STORAGE** - February 1 storage in 29 major **South Coast Region** reservoirs was 1.2 million acre-feet or 90 percent of average. About 55 percent of available capacity was being used. Storage in these reservoirs at this time last year was 75 percent of average. On February 1 combined storage in Lakes Powell, Mead, Mohave and Havasu was about 24.2 million acre-feet or about 65 percent of average. About 45 percent of available capacity was in use. Last year at this time, these reservoirs were storing 60 percent of average.

**RUNOFF** - Seasonal runoff from selected **South Coast Region** streams is 39 thousand acre feet which is 75 percent of average.

#### COLORADO RIVER

The April -July inflow to Lake Powell is forecast to be 9.6 million acre-feet, which is 134 percent of average. The February 1 snowpack in the Colorado River basin above Lake Powell was 160 percent of average, highest in the Duchesne at 195 percent and lowest in the Yampa/White at 130 percent.

## MAJOR WATER DISTRIBUTION PROJECTS RESERVOIR STORAGE

(AVERAGES BASED ON 1951-2000 OR PERIOD RECORD)

RESERVOIR	CAPACITY 1,000 AF	AVERAGE STORAGE 1,000 AF	2016 1,000 AF	2017	GE AT END PERCENT AVERAGE	PERCENT			
STATE WATER PROJEC		0.000	4 504	0.040	4040/	000/			
Lake Oroville	3,538	2,292	1,534	2,842	124%	80%			
San Luis Reservoir (SWF	•	840	504	1,026	122%	97%			
Lake Del Valle	77	31	31	40	128%	52%			
Lake Silverwood	78 100	66	66	68	102%	87%			
Pyramid Lake	180	163	169	165	101%	92%			
Castaic Lake	325	267	111	260	97%	80%			
Perris Lake	131	102	47	50	49%	38%			
CENTRAL VALLEY PROJECT									
Trinity Lake Lake Shasta	2,448 4,552	1,685 3,034	695 2,346	1,461 3,546	87% 117%	60% 78%			
Whiskeytown Lake	4,552 241	3,034 205	2,346	215	105%	89%			
Folsom Lake	977	500	529	408	82%	42%			
New Melones Reservoir	2,400	1,414	393	1,013	72%	42 <i>%</i> 42%			
Millerton Lake	520	331	208	343	104%	66%			
San Luis Reservoir (CVP		733	189	674	92%	69%			
COLORADO RIVER PRO	,	733	103	074	<i>32</i> /6	0376			
Lake Mead	26,159	19,139	10,318	10,521	55%	40%			
Lake Powell	24,322	16,985	11,427	11,359	67%	47%			
Lake Mohave	1,810	1,674	1,651	1,712	102%	95%			
Lake Havasu	648	551	554	567	103%	87%			
EAST BAY MUNICIPAL U			00.	007	10070	0.70			
Pardee Res	204	179	163	204	114%	100%			
Camanche Reservoir	417	246	90	271	110%	65%			
East Bay (4 res.)	159	124	122	146	117%	92%			
CITY AND COUNTY OF SAN FRANCISCO									
Hetch-Hetchy Reservoir	360	184	281	311	169%	86%			
Cherry Lake	268	159	94	228	143%	85%			
Lake Eleanor	29	11	4	17	158%	59%			
South Bay/Peninsula (4 r	es.) 238	156	152	0	0%	0%			
CITY OF LOS ANGELES (D.W.P.)									
Lake Crowley	183	122	115	123	100%	67%			
Grant Lake	48	29	11	24	83%	50%			
Other Aqueduct Storage	(6 res.) 83	75	59	72	96%	87%			

#### **TELEMETERED SNOW WATER EQUIVALENTS**

February 1, 2017 (AVERAGES BASED ON PERIOD RECORD)

	(//\V	INACES BASED C	INIC	•	R EQUIVALENT	
DAOININIANAE		ADDII 4	INC			4 /4/55/2
BASIN NAME		APRIL 1		PERCENT	24 HRS	1 WEEK
STATION NAME	ELEV	AVERAGE	Feb 1 OF	AVERAGE	PREVIOUS	PREVIOUS
TRINITY RIVER	7150'	20.2	04.6	0.4.1	24.7	24.0
Peterson Flat Red Rock Mountain	7150' 6700'	29.2 39.6	24.6 43.6	84.1 110.2	43.5	24.0 42.6
Bonanza King	6450'	40.5	<del></del>	110.2	40.0	42.0
Shimmy Lake	6400'	40.3	_	_	_	_
Middle Boulder 3	6200'	28.3	22.3	78.7	22.5	22.2
Highland Lakes	6030'	29.9	25.6	85.5	25.7	25.8
Scott Mountain	5900'	16.0	14.6	91.4	14.8	14.5
Mumbo Basin	5650'	22.4	23.4	104.5	23.4	22.8
Big Flat	5100'	15.8	19.1	120.8	19.0	18.6
Crowder Flat	5100'	_	4.2	_	4.2	4.1
SACRAMENTO RIVER	74001	40.4	10.1	70.4	40.0	10.1
Cedar Pass Blacks Mountain	7100' 7050'	18.1 12.7	13.1 8.6	72.4 68.0	13.2 8.6	13.1 8.2
Sand Flat	6750°	12.7 42.4	24.2	57.2	24.1	23.5
Medicine Lake	6700°	32.6	23.1	71.0	23.0	23.5
Adin Mountain	6200'	13.6	13.3	97.8	13.3	12.6
Snow Mountain	5950'	27.0	31.9	118.2	32.2	32.2
Slate Creek	5700'	29.0	28.0	96.4	28.0	27.1
Stouts Meadow	5400'	36.0	31.0	86.0	31.0	30.0
FEATHER RIVER						
Lower Lassen Peak	8250'	_	_	_	_	_
Kettle Rock	7300'	25.5	27.4	107.3	27.4	26.9
Grizzly Ridge	6900'	29.7	24.0	80.8	24.0	23.0
Pilot Peak	6800'	52.6	36.9	70.1	36.8	35.6
Gold Lake	6750'	36.5	34.5	94.5	34.5	34.1
Humbug	6500'	28.0	27.0	96.4	27.0	26.8
Harkness Flat Rattlesnake	6200' 6100'	28.5 14.0	22.6 25.0	79.1 178.3	22.5 25.0	22.5 23.2
Bucks Lake	5750°	44.7	36.0	80.5	36.0	36.0
Four Trees	5150'	20.0	30.4	151.8	30.5	30.6
EEL RIVER	0100	20.0	00.4	101.0	00.0	00.0
Hull Mountain	6461'	_	_	_	_	_
Noel Spring	5100'	_	12.0	_	12.0	8.9
YUBA & AMERICAN RIVERS						
Schneiders	8750'	34.5	47.4	137.3	47.4	47.7
Lake Lois	8600'	39.5	_	_	_	_
Carson Pass	8353'		30.5		30.5	30.6
Caples Lake	8000'	30.9	34.8	112.6	34.8	34.0
Alpha	7600'	35.9	34.3	95.5	34.3	33.8
Forni Ridge Meadow Lake	7600' 7200'	37.0 55.5	40.3	108.9	40.3	40.0
Silver Lake	7200 7100'	22.7	23.2	102.0	23.2	23.2
Central Sierra Snow Lab	6900'	33.6	42.0	125.0	41.9	41.4
Van Vleck	6700'	35.9	41.2	114.8	41.2	40.8
Huysink	6600'	42.6	30.5	71.5	30.5	30.4
Robinson Cow Camp	6480'	_	41.2	_	41.1	40.4
Robbs Saddle	5900'	21.4	22.4	104.9	22.5	22.1
Greek Store	5600'	21.0	26.9	128.0	26.9	26.5
Blue Canyon	5280'	9.0	23.2	258.2	23.3	23.1
Robbs Powerhouse	5150'	5.2	17.3	333.1	17.4	17.6
MOKELUMNE & STANISLAUS		07.0	05.0	04.5	05.0	0.4.0
Deadman Creek	9250'	37.2	35.2	94.5	35.0	34.2
Highland Meadow Gianelli Meadow	8700' 8400'	47.9 55.5	52.9 45.0	110.4 81.1	52.7 45.0	51.1 44.2
Lower Relief Valley	8100'	41.2	45.0	01.1	43.0	44.2
Blue Lakes	8000'	33.1	31.3	94.6	31.1	30.6
Stanislaus Meadow	7750'	47.5	44.4	93.5	44.4	43.8
Bloods Creek	7200'	35.5	27.8	78.4	27.7	27.2
Black Springs	6500'	32.0	25.0	78.0	25.0	25.0
TUOLUMNE & MERCED RIVER						
Dana Meadows	9800'	27.7	33.8	121.9	33.9	34.7
Slide Canyon	9200'	41.1	45.3	110.2	45.2	44.4
Tuolumne Meadows	8600'	22.6	29.6	131.2	29.4	28.3
Horse Meadow	8400'	48.6	53.3	109.6	53.1	53.0
Ostrander Lake	8200'	34.8		405.0		
Lake Tenaya White Wolf	8150'	33.1	41.5	125.3	41.5	41.5
Paradise Meadow	7900' 7650'	— 41.3	33.3 43.5	105.3	33.3 43.3	33.1 41.9
Gin Flat	7050'	34.2	43.3 —	100.0	43.3	41.9
Lawar Kibbia Didaa	6700'	07.4	01.0	70.6	21.0	21.0

21.8

79.6

21.8

21.9

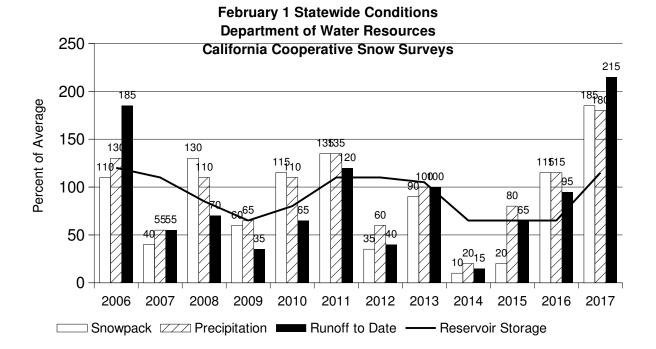
27.4

6700'

Lower Kibbie Ridge

CAN ICACUIN DIVED						
SAN JOAQUIN RIVER Volcanic Knob	10050'	30.1	39.0	129.7	39.0	39.3
Agnew Pass	9450'	32.3	41.6	128.8	41.6	41.3
Kaiser Point	9200'	37.8	45.6	120.6	45.6	44.4
Green Mountain	7900'	30.8	38.5	125.1	38.4	37.7
Devil's Postpile	7569'	_	35.7	_	36.0	38.0
Tamarack Summit	7550'	30.5	29.0	95.2	28.7	26.8
Chilkoot Meadow	7150'	38.0	32.5	85.6	32.5	31.8
Huntington Lake	7000' 6900'	20.1 18.8	22.3	111.0	22.3	21.6
Graveyard Meadow Poison Ridge	6900'	28.9	29.6	102.6	29.6	28.4
KINGS RIVER	0300	20.3	25.0	102.0	25.0	20.4
Bishop Pass	11200'	34.0	24.5	72.1	24.5	24.3
Charlotte Lake	10400'	27.5	_	_	_	_
State Lakes	10300'	29.0	38.6	133.2	38.5	38.0
Blackcap Basin	10300'	34.3	_			
Mitchell Meadow	9900'	32.9	40.8	124.0	40.8	40.8
Upper Burnt Corral	9700'	34.6 32.8	43.8	126.5 133.4	43.9	44.7 43.5
West Woodchuck Meadow Big Meadows	9100' 7600'	32.8 25.9	43.8 22.0	84.8	44.1 22.1	22.5
KAWEAH & TULE RIVERS	7000	25.9	22.0	04.0	22.1	22.5
Farewell Gap	9500'	34.5	53.4	154.8	53.3	53.0
Quaking Aspen	7200'	21.0	27.2	129.7	27.1	26.5
Giant Forest	6650'	10.0	16.6	166.1	16.6	16.0
KERN RIVER						
Upper Tyndall Creek	11400'	27.7	31.1	112.3	31.1	_
Crabtree Meadow	10700'	19.8	_			
Chagoopa Plateau	10300'	21.8	33.1	151.7	33.2	33.4
Pascoes Wat Mandawa	9150'	24.9	40.5	162.5	40.3	37.9
Wet Meadows Tunnel Guard Station	8950' 8900'	30.3 15.6	41.0 26.1	135.2 167.1	41.1 27.1	41.3 24.7
Casa Vieja Meadows	8300'	20.9	26.9	128.5	27.1	29.5
Beach Meadows	7650'	11.0	17.6	160.4	17.5	16.3
SURPRISE VALLEY AREA						
Dismal Swamp	7050'	29.2	23.1	79.1	23.1	23.1
TRUCKEE RIVER						
Big Meadows	8700'	25.7	28.9	112.5	28.9	28.5
Independence Lake	8450'	41.4	43.0	103.8	43.1	43.2
Squaw Valley	8200' 7000'	46.5 21.8	47.6 15.4	102.4 70.6	47.4 15.6	46.8 16.1
Independence Camp Independence Creek	6500°	12.7	13.1	103.1	13.0	12.6
Truckee 2	6400'	14.3	21.7	151.7	21.7	21.5
LAKE TAHOE BASIN						
Mount Rose Ski Area	8900'	38.5	49.4	128.3	49.5	49.1
Heavenly Valley	8800'	28.1	31.4	111.7	31.5	31.5
Hagans Meadow	8000'	16.5	22.9	138.8	22.7	21.2
Marlette Lake	8000'	21.1	26.4	125.1	26.5	26.3
Echo Peak 5 Rubicon Peak 2	7800' 7500'	39.5 29.1	47.0 31.2	119.0 107.2	46.9 31.1	46.3 30.1
Tahoe City Cross	6750°	16.0	15.9	99.4	15.9	16.6
Ward Creek 3	6750'	39.4	37.5	95.2	37.3	36.8
Fallen Leaf Lake	6250'	7.0	12.4	177.1	12.5	12.7
CARSON RIVER						
Ebbetts Pass	8700'	38.8	45.8	118.0	45.7	44.9
Horse Meadow	8557'	_	27.3	_	27.4	27.1
Monitor Pass	8350'	_	18.6	_	18.6	18.5
Burnside Lake Forestdale Creek	8129' 8017'	_	31.2 34.7	_	31.3 34.8	31.8 35.5
Poison Flat	7900'	16.2	24.5	 151.2	24.5	22.9
Spratt Creek	6150°	4.5	10.8	240.0	10.9	10.6
WALKER RIVER	0100	1.0	10.0	210.0	10.0	10.0
Leavitt Lake	9600'	_	61.5	_	61.5	60.5
Summit Meadow	9313'	_	25.0	_	25.1	25.0
Virginia Lakes	9300'	20.3	21.0	103.4	21.1	21.5
Lobdell Lake	9200'	17.3	19.6	113.3	19.6	19.4
Sonora Pass Bridge	8750'	26.0	28.3	108.8	28.3	27.5
Leavitt Meadows  OWENS RIVER/MONO LAKE	7200'	8.0	15.8	197.5	15.9	15.7
Gem Pass	10750'	31.7	25.3	79.9	25.4	25.7
Sawmill	10200'	19.4	22.9	117.9	22.1	23.4
Cottonwood Lakes	10150'	11.6		_		_
Big Pine Creek	9800'	17.9	22.9	128.2	22.8	22.4
Rock Creek Lakes	9700'	14.0	_	_	_	_
South Lake	9600'	16.0	22.6	141.0	22.7	23.4
Mammoth Pass	9300'	42.4	43.2	101.9	43.1	42.8

NORMAL SNOWPACE	( ACCUMULATIC	N EXPRESSED AS	A PERCENT	OF APRIL 1ST	AVERAGE
AREA	JANUARY	<b>FEBRUARY</b>	MARCH	APRIL	MAY
Central Valley North	45%	<b>15</b> 70%	90%	100%	75%
Central Valley South	45%	65%	85%	100%	80%
North Coast	40%	60%	85%	100%	80%



#### **SNOWLINES**

Registration is now open for the **85th annual Western Snow Conference** to be held in Boise, Idaho, April 17-20, 2017. We expect to have a full agenda of informative and interesting presentations related to snow hydrology, meteorological measurement techniques, and water resource management. This is a joint meeting with the Weather Modification Association.

Meeting Information:

http://www.westernsnowconference.org/meetings/2017

Online Registration:

www.regonline.com/westernsnowconference2017

The Conference will begin Monday, April 17th with a short course and panel discussion on "Tracing the Effects of Cloud Seeding through the Hydrologic Cycle". Tuesday and Wednesday will include formal paper and poster presentations on a variety of topics, including climate variability, climate change impacts on snow and runoff, water management, water supply forecasting, and modeling and climatology of snow. Thursday will include a technical tour of the nearby Boise River Basin.

**<u>Depicted</u>** on this month's cover are Rob and Laura Pilewski, Yosemite National Park winter rangers, changing the fluid in a precipitation gauge at Tuolumne Meadows in Yosemite. In the background is the depth gauge, now buried in the snow.